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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,779	04/16/2004	Michael Sweeting	03-1083	1294
63710 7590 12/09/2008 DEAN P. ALDERUCCI CANTOR FITZGERALD, L.P. 110 EAST 59TH STREET (6TH FLOOR) NEW YORK, NY 10022				
EXAMINER JOHNSON, GREGORY L.				
ART UNIT 3691		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/826,779

Applicant(s)

SWEETING ET AL.

Examiner

GREGORY JOHNSON

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to the amendment filed August 4, 2008

Status of Claims

2. Claims 1-7, 9-12, 14 and 16-32 have been amended. Claims 8, 13, 15 and 33 are original. Claims 34-38 have been canceled. Claims 1-33 are pending.

Response to Arguments

3. In response to applicant's argument that Peterffy and Konia are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the particular problem is the prioritization of requests (e.g. bids, quotes, offers etc.) that have been submitted by participants of an electronic trading platform and the ability to maintain the priority based on user defined criteria (e.g. pricing adjustments) which is described by both references. Therefore, the combination is proper.

Applicants argues (page 11) the following elements:

- a dynamic price improvement order that indicates that the electronic trading system should maintain a priority of the dynamic price

improvement order (e.g. Konia's prioritization method for handling orders from buyers; Abstract and col. 11, lines 19-45); and

- in which the priority includes a priority used by the electronic trading system for determining matches with contra orders (e.g. Peterffy's Price improvement processor for electronic trading of financial instruments (Abstract); and orders from all types of market participants may interact directly with each other on a price/time priority basis; ¶0008).

The passages recited above disclose and teach the elements argued by the Applicants. Therefore, as to claims 1-33, the combination of Peterffy, Konia and Serkin discloses and teaches the invention substantially as claimed. The § 103(a) rejections are maintained.

Claim Objections

4. Claims 35-38 were previously objected to for minor informalities. The claims have been canceled, thereby making the objection moot. However, claims 4 and 20 are now objected to for the following informalities:

Claims 4 recites: "The method according to *claim 2 1*, in which the change includes a decrease in the first price" (will be interpreted as "claim 1,").

Claim 20 recites: "The system according to *claim 18, 1*, in which the change includes an increase in the first price" (will be interpreted as "claim 18,").

Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1-13, 15-29 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterffy et. al., Pub. No. 2004/0254804 (hereinafter Peterffy) in view of Konia, Pat. No. 7,225,151 (hereinafter Konia).

As to claims 1 and 18, Peterffy discloses a method and system for operating an electronic trading system for the exchange of financial instruments (Abstract), the method comprising:

- receiving a dynamic price improvement order, in which the dynamic price improvement order is associated with a trade for a financial instrument traded on the electronic trading system (e.g. an OFP may submit any customer order for price improvement into the PIP processor 30 at a price

of at least one cent (\$0.01 is used as an example) better than the prevailing NBBO bid; ¶¶0022 and ¶¶0046),

- in which the priority includes a priority used by the electronic trading system for determining matches with contra orders (e.g. orders from all types of market participants may interact directly with each other on a price/time priority basis; ¶¶0008); and
- receiving the at least one second order (e.g. orders from all types of market participants may interact directly with each other on a price/time priority basis; ¶¶0008).

Peterffy discloses that the PIP processor is utilized on an electronic non-specialist auction market or exchange ("Exchange"). However, Peterffy does not disclose the following elements:

- in which the dynamic price improvement order indicates that the electronic trading system should maintain a priority of the dynamic price improvement order by adjusting a first price associated with the dynamic price improvement order to a level that is at least as good as at least one second price associated with at least one second order, and
- determining a price improvement level to assign to the dynamic price improvement order so that the priority of the dynamic price improvement order is maintained, and in which the price improvement level corresponds to an amount of change to the first price; and

- assigning one of a plurality of the price improvement level to said order, the dynamic price improvement order, said assigned price improvement level defines said improved price of said order such that said order is placed in a predetermined position within said trading stack; and
- maintaining said position of said order in said stack until said order is matched or cancelled.

However, Konia teaches a method for automatically managing an auction for determining relative priority for a service in a system wherein priority is based on the relative value of related bids is disclosed. The method comprises checking for whether a first bid exceeds a second bid in an auction for determining continuing priority for providing an ongoing service for at least a first and second bidder, wherein the relative priority for providing the service for the first bidder is dependent on whether the value of the first bid exceeds the value of the second bid, and wherein the relative priority for providing the service for the second bidder is dependent on whether the value of the second bid exceeds the value of the first bid. The method further comprises incrementing the first bid to a value exceeding the second bid if the first bid does not exceed the second bid, thereby causing the relative priority for providing service for the first bidder to exceed the priority for providing service for the second bidder. The steps of checking and incrementing may be executed a plurality of times (i.e. bids are dynamically adjusted; see Abstract and col. 12, lines 2-5).

Peterffy discloses a price improvement processor to effectuate more rapid matching of bids and offers of financial instruments by conducting a rapid automated

an auction in which certain market participants may provide price improvement in increments that are finer than the prevailing standard minimum price variation and are provided a certain allocation as an incentive for such price improvements (Abstract). Peterffy also discloses that the orders (i.e. bids) orders from all types of market participants may interact directly with each other on a price/time priority basis (§0008). Peterffy also discloses that the orders are held in a Book (i.e. stack, queue etc).

Konia teaches a method for managing the priority of bids that have been submitted by buyers within an auction. Konia teaches that bidders can enter bids with maximum and minimum and that the online bid management system would keep track of the bids. Konia teaches that the system would increment (i.e. adjust) the lower bids until they reach their desired bidding position (e.g. position in a stack), while ensuring that the bids do not exceed their maximum values (col. 5, lines 50-67). Konia also discloses that the bidders and their bids can be replaced with buyers and their orders placed for products or services (col. 11, lines 19-45).

The concept/method taught by Konia comprises: (1) a method for managing the priority position of bids/orders (e.g. dynamic price improvement order) that have been submitted with minimum and maximum amounts (i.e. price improvements), (2) a method for adjusting the bids/orders dynamically to maintain the position, while staying within the range set by the minimum and maximum amounts (i.e. dynamic price improvement indicators) and (3) maintaining said position until order ends.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the aforementioned method as taught by Konia

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within Peterffy for the motivation of having a system that monitors the current rankings in auctions (e.g. trading systems) and automatically adjusts its bids/orders according to rules defined by its user (col. 1, lines 27-29). In addition, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include in the trading network of Peterffy, the above mentioned elements as taught by Konia, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable. See MPEP 2143 (Rev. 6, Sept. 2007).

As to claims 2-3, Peterffy discloses the following limitations:

- The method according to claim 1, in which the at least one second order includes a plurality of second orders associated with a plurality of second prices (e.g. orders from all types of market participants may interact directly with each other on a price/time priority basis; ¶0008); and
- The method according to claim 1, in which the change includes an increase in the first price (e.g. certain market participants may provide price improvement in increments that are finer than the prevailing standard minimum price variation; Abstract).

The limitations of claims 19-20 are equivalent to the limitations of claims 2-3, and are therefore rejected on the same grounds.

As to claims 4 and 10, Peterffy does not disclose the following limitations:

- The method according to claim 2 1, in which the change includes a decrease in the first price.
- The method according to claim 1, wherein determining includes determining the price improvement level such that it is one level higher than the next best order in an order stack, wherein the price improvement level can be adjusted up to a maximum price improvement level.

However, Konia teaches a method and system for automatically managing an auction for determining relative priority for a service in a system wherein priority is based on the relative value of related bids is disclosed. Konia teaches that the system can perform checks for whether a vendor's bid/order is lower than all other bids/orders in an auction (e.g. trading system). The vendor is allowed to choose a desired position and the system can determine the maximum that the vendor's bid need to be in order to obtain the priority position (e.g. position in a stack). If the system finds that the vendor has achieved the desired position with respect to the buyer server being processed, the system may increase the bid to a maximum which allows the bidder to keep the desired priority. Otherwise, the system decreases the bid without lowering the bid below the minimum bid entered by the vendor (Abstract and col. 10, lines 53-67).

The concept/method taught by Konia comprises: (1) a method for managing the priority position of bids/orders (e.g. dynamic price improvement order) that have been submitted with minimum and maximum amounts (i.e. price improvements), (2) a method for adjusting the bids/orders dynamically to maintain the position, while staying within

the range set by the minimum and maximum amounts (i.e. dynamic price improvement indicators) and (3) maintaining said position until order ends.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the aforementioned method as taught by Konia within Peterffy for the motivation of having a system that monitors the current rankings in auctions (e.g. trading systems) and automatically adjusts its bids/orders according to rules defined by its user (col. 1, lines 27-29). In addition, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include in the trading network of Peterffy, the above mentioned elements as taught by Konia, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable. See MPEP 2143 (Rev. 6, Sept. 2007).

The limitations of claims 21 and 26 are equivalent to the limitations of claims 4 and 10, and are therefore rejected on the same grounds.

As to claims 5-9 and 11, Peterffy discloses the following elements:

- The method according to claim 1, in which the priority includes a position at a front of a trading stack (i.e. top of the book; ¶0040);
- The method according to claim 1, further comprising assigning a timestamp to the dynamic price improvement order (¶0025);

- The method according to claim 6, further comprising maintaining the priority based on said timestamp (e.g. price/time priority; ¶0008);
- The method according to claim 6, wherein in the event two or more said dynamic price improvement orders are received, the orders with older timestamps are matched prior to orders with newer timestamps (¶0042);
- The method according to claim 1, wherein said price improvement level represents a fraction of a predetermined pricing increment for which orders may be submitted to the electronic trading system (¶0047);
- The method according to claim 1, wherein the priority includes a position of the dynamic price improvement order relative to other orders in an order stack (i.e. top of the book; ¶0040).

The limitations of claims 22-25 and 27 are equivalent to the limitations of claims 5-9 and 11, and are therefore rejected on the same grounds.

As to claims 12 and 28, Peterffy discloses the following limitations:

- determining the price improvement level of a best order in an order stack (¶0053); and
- assigning a price improvement level to said price improvement order that improves the price improvement level of said best order by one price improvement level when the price improvement level of said best order is not a maximum price improvement level (¶0053).

As to claims 13 and 29, Peterffy discloses the following element:

- assigning said maximum price improvement level to said dynamic price improvement order when the price improvement level of said best order is at said maximum price improvement level (§§0024, §§0047 and §§0073-0087).

As to claims 15 and 33, Peterffy discloses the following element:

- wherein said price improvement order is one of several price improvement order types selected by a trader using said electronic trading system (i.e. several types of order types can be submitted to the trading host and then the order could be submitted for price improvement into the PIP processor (§§0026-0035 and §§0046).

As to claims 16-17 and 31-32, Peterffy does not disclose the following element:

- decreasing the price improvement level of the at least one second order such that the price improvement level of the at least one second order does not exceed the price improvement level assigned to the dynamic price improvement order; and
- wherein the price improvement level of the at least one second order is decreased to a price improvement level one level below a maximum price improvement level when the at least one price improved order is assigned a maximum price improvement level as its price improvement level.

However, Konia teaches a method and system for automatically managing an auction for determining relative priority for a service in a system wherein priority is based on the relative value of related bids is disclosed. Konia teaches that the system can perform checks for whether a vendor's bid/order is lower than all other bids/orders in an auction (e.g. trading system). The vendor is allowed to choose a desired position and the system can determine the maximum that the vendor's bid need to be in order to obtain the priority position (e.g. position in a stack). If the system finds that the vendor has achieved the desired position with respect to the buyer server being processed, the system may increase the bid to a maximum which allows the bidder to keep the desired priority. Otherwise, the system decreases the bid without lowering the bid below the minimum bid entered by the vendor (Abstract and col. 10, lines 53-67).

The concept/method taught by Konia comprises: (1) a method for managing the priority position of bids/orders (e.g. dynamic price improvement order) that have been submitted with minimum and maximum amounts (i.e. price improvements), (2) a method for adjusting the bids/orders dynamically to maintain the position, while staying within the range set by the minimum and maximum amounts (i.e. dynamic price improvement indicators) and (3) maintaining said position until order ends.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the aforementioned method as taught by Konia within Peterffy for the motivation of having a system that monitors the current rankings in auctions (e.g. trading systems) and automatically adjusts its bids/orders according to rules defined by its user (col. 1, lines 27-29). In addition, it would have been obvious to

one of ordinary skill in the art at the time of Applicant's invention to include in the trading network of Peterffy, the above mentioned elements as taught by Konia, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable. See MPEP 2143 (Rev. 6, Sept. 2007).

8. Claims 14 and 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peterffy and Konia as applied to claims 1 and 18 above, and further in view of Serkin et al., Pat. No. 7,209,896 (hereinafter Serkin).

As to claims 14 and 30, neither Peterffy nor Konia discloses or teaches the following limitation:

- wherein said dynamic price improvement order is the default order type for a predetermined number of traders that use a trading interface to submit orders to the electronic trading system (i.e. the system provides the ability to set a default order type).

However, Serkin teaches a system for handling quotes in an electronic market, said system being capable of processing price improvement orders (Abstract and col. 10, lines 46-51). Serkin also teaches that the system uses a "point-and-click" window-type technology that provides a "default" order feature. Both Peterffy and Serkin disclose and teach system for handling quotes which may contain various types of

orders. Therefore, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include in the trading network of Peterffy, the ability to set a default order type as taught by Serkin, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in that art would have recognized that the results of the combination were predictable. See MPEP 2143 (Rev. 6, Sept. 2007).

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GREGORY JOHNSON whose telephone number is

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(571)272-2025. The examiner can normally be reached on Monday - Friday, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ALEXANDER KALINOWSKI can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Kalinowski/
Supervisory Patent Examiner, Art Unit 3691

GREGORY JOHNSON
Examiner, Art Unit 3691